PART 1 – THE SCHEDULE

SECTION C

DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

TABLE OF CONTENTS

SECTION C

DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C.1 OBJECTIVE

The Contractor shall operate depleted uranium hexafluoride (DUF6) conversion facilities on DOE property at Paducah, Kentucky and Portsmouth, Ohio in accordance with this Statement of Work and contract terms and conditions. These conversion facilities are designed and constructed to convert DOE's inventory of depleted uranium hexafluoride (DUF6), now located at the Paducah Gaseous Diffusion Plant and the Portsmouth Gaseous Diffusion Plant, to a more stable uranium oxide form (UO_x), to be characterized as acceptable for transportation and disposal. The Contractor shall also provide continuing cylinder surveillance and maintenance (S&M) services for the DOE inventory of DUF6, low-enrichment uranium (LEU) hexafluoride (UF6), normal UF6, and empty and heel cylinders in a safe and environmentally acceptable manner.

The activities within the scope of this Statement of Work include:

- Provide S&M for the DUF6 conversion facilities and associated equipment.
- Operate the conversion facilities to convert the DUF6 from the inventory at Paducah and Portsmouth to uranium oxide at design throughput of the conversion facilities.
- Reuse and/or transport and dispose of the DUF6 conversion process end-products and wastes.
- Sell the aqueous hydrofluoric acid (AqHF) product.
- Provide S&M services for the cylinder storage yards.

C.2 BACKGROUND

C.2.1 Storage and Disposition of Depleted Uranium

C.2.1.1 DOE has the programmatic responsibility for the Government's DUF6 inventory as the successor of the Atomic Energy Commission and the Energy Research and Development Administration. The chemical and physical characteristics of DUF6 pose potential health risks, and the material must be handled accordingly.

C.2.1.2 Since the 1950s, DUF6 has been stored at Oak Ridge TN, Paducah KY, and Portsmouth OH in large steel cylinders. Cylinders formerly at Oak Ridge have been relocated to Portsmouth, where storage continues along with storage at Paducah. Most cylinders have a 14-ton (12-metric-ton) capacity and are 12 ft (3.7 m) long by 48 inches (1.2 m) in diameter, with a steel wall thickness of 5/16 in. (0.79 cm). Similar but smaller cylinders are also in use, and at Paducah there are several 19-ton (CV19) cylinders

made of former UF6 gaseous diffusion conversion shells. During storage, a cylinder contains predominantly solid DUF6 in contact with DUF6 vapor at less than atmospheric pressure. The DUF6 cylinders managed by DOE at the two sites are typically stacked two cylinders high in the cylinder storage yards.

C.2.1.3 Since 1990, the Department's cylinder management has focused on the ongoing S&M of the cylinders containing DUF6. Public Law (P.L.) 105-204, signed by the President in July 1998, directed the Secretary of Energy to prepare and submit to Congress a plan to ensure that all funds accrued on the books of the United States Enrichment Corporation (USEC) for the disposition of DUF6 will be used for the construction and operation of plants to treat and recycle DUF6 consistent with the National Environmental Policy Act (NEPA).

C.2.2 Site Information

C.2.2.1 The Paducah Gaseous Diffusion Plant is located in western McCracken County, 15 miles west of Paducah, Kentucky, between U.S. Highway 60 and the Ohio River and consists of approximately 115 buildings and structures. A single rail system serves the site with a spur that accesses both the oxide and HF load-out areas.

C.2.2.2 The Portsmouth Gaseous Diffusion Plant is located 23 miles north of Portsmouth near Piketon, Ohio, on U.S. Highway 23. A single rail system serves the site. Facilities required for the gaseous diffusion operations have been placed in stand-by and are leased to USEC in accordance with the USEC/DOE lease agreement.

C.2.2.3 The Paducah and Portsmouth DUF6 conversion facilities were designed and built by the UDS Incumbent Contractor. Construction of both conversion facilities will be complete and Operational Readiness Reviews (ORRs) will have been completed by the UDS Incumbent Contractor and the DOE in accordance with DOE Order 425.1C Startup and Restart of Nuclear Facilities prior to initial operations.

C.2.2.4 Upon Contracting Officer (CO) issuance of the Notice to Proceed beginning the Mobilization and Transition Phase, all ORR "Pre-start" findings shall be in the process of closure by the UDS Incumbent Contractor. At completion of the Mobilization and Transition Phase, the ORR Pre-start findings will be closed, and the Department will have completed and approved the DOE ORR. During this period the UDS Incumbent Contractor will be executing a DOE approved ORR Post-start findings corrective action plan. Any Post-start findings not completed by the UDS Incumbent Contractor may transition to the Contractor at the conclusion of the Mobilization and Transition Phase.

C.3 MOBILIZATION AND TRANSITION, AND OPERATIONS, TESTING, AND START-UP

C.3.1 After receiving a written Notice to Proceed from the CO, the Contractor shall begin mobilization and transition activities in accordance with the terms of the contract. The Mobilization and Transition Phase shall be performed within 90 days of receipt of the Notice, and at its conclusion, the Contractor shall assume full responsibility for the conversion facilities operation and cylinder surveillance and maintenance (S&M). Following completion of the Mobilization and Transition Phase, the Contractor shall begin the Operations, Testing and Start-up Phase. Activities for this phase will be completed within the following 270 days. This phase shall be considered complete when the conversion operations reach steady state operations at full design capacity. During this 270-day period, the Contractor shall complete a Readiness Assessment (RA), complete hot functional testing (if option exercised), initiate partial conversion operations, and increase conversion operations to facility design throughput capacity.

C.3.1.1 The Contractor shall prepare and deliver an **Operations Transition and Start-up Plan (OTSP), which** shall guide the first two phases of contract activities. The plan shall include two sections:

C.3.1.1.1 The first section of the OTSP shall cover the Mobilization and Transition Phase, to occur within the 90-day period after the CO issues the Notice to Proceed. Completion of the Mobilization and Transition Phase shall result in transition of operational responsibility for the conversion facility and cylinder S&M from the UDS Incumbent Contractor to the Contractor. During transition phase execution of the OTSP, the Contractor shall review the existing approved **Cylinder Surveillance and Maintenance Plan [D-34]** (see Section F, Table F-1) and either accept or revise this plan. The existing plan or any revisions made to the existing plan shall be submitted to the DOE for approval prior to the Contractor's assuming cylinder S&M responsibility.

C.3.1.1.2 The second section of the OTSP shall cover the Operations, Testing and Start-up Phase, to occur within the 270-day period following the completion of the 90-day Mobilization and Transition Phase. This section of the OTSP shall address activities including the readiness assessment (RA), hot functional testing , initiation of partial conversion operations, and ramp-up of the facility to full conversion operations.

C.3.1.1.3 The CO will include in the Notice to Proceed that the OTSP has been approved and designated as revision 0. The Contractor shall manage the first 360 days following the CO's Notice to Proceed according to the approved OTSP and any additional guidance from the CO. Refer to Section F "Deliveries or Performance" for detailed instructions, requirements, and schedule for the submission of reports, plans, and

other required documents, during the Operations, Testing and Startup phase.

C.3.1.2 The Mobilization and Transition Phase, as part of Section one of the OTSP, shall address the following activities. In addition, a schedule of these activities shall be included for this 90-day phase.

C.3.1.2.1 Communication process among DOE, the UDS Incumbent Contractor, UDS Incumbent Contractor subcontractors, Contractor employees, USEC, other contractors or tenants at the Portsmouth or Paducah site;

C.3.1.2.2 Identification of key transition issues and milestones, including transition of the cylinder S&M responsibilities;

C.3.1.2.3 Identification of a contractor transition team (inclusive of consultants and teaming);

C.3.1.2.4 Integration of work packages (direct and indirect) and budgets from UDS Incumbent Contractor subcontractors;

C.3.1.2.5 Human resource management consistent with Workforce Transition and Contractor Human Resources Management requirements as described in Section H;

C.3.1.2.6 Implementation of existing or proposed management and operating systems (e.g., project management, Integrated Safety Management, operating procedures, electronic data processing, budget and planning, purchasing, compensation, labor/payroll, indirect and direct costs, property management, billing and estimating);

C.3.1.2.7 Assumption of all Environmental, Safety and Health (ES&H) responsibilities, functions, and activities;

C.3.1.2.8 A cost breakdown supporting the mobilization and transition activities;

C.3.1.2.9 Development of all interface control documents;

C.3.1.2.10 Assumption of permits, applications, licenses, and other regulatory documents;

C.3.1.2.11 Performance of a physical walk-down of the facilities and equipment with the UDS Incumbent Contractor;

C.3.1.2.12 Review of as-built drawings and technical specifications with the UDS Incumbent Contractor;

C.3.1.2.13 Assumption of Authorization Basis documents and Documented Safety Analysis process; and,

C.3.1.2.14 Schedule and milestones for finalization of required deliverables as described in Table F-1 Deliverables.

C.3.1.2.15 After the Contractor completes the activities contained in the Mobilization and Transition Phase section of the approved OTSP, including any other activities as may be authorized or directed by the CO, the Contractor shall notify the CO in writing that it is ready to assume full responsibility for conversion facility operations and cylinder S&M.

C.3.1.2.16 The Contractor shall assume full responsibility for conversion facility operations, cylinder S&M, and proceed to the Operations, Testing and Start-up Phase on the date of approval specified in writing by the CO.

C.3.1.3 The Operations, Testing and Start-up Phase, as part of section two of the OTSP, shall address, but not be limited to, the following activities. In addition, a schedule of these activities shall be included for this 270-day phase.

C.3.1.3.1 Develop written programs, policies, procedures, and plans associated with facility operations, including cylinder S&M. Documents developed by the UDS Incumbent Contractor during the Operational Readiness Review (ORR) will be made available to the Contractor, which the Contractor is encouraged to evaluate and revise for its use;

C.3.1.3.2 Review the existing **Cylinder Surveillance and Maintenance Plan [D-34]** (see Section F, Table F-1) and revise this plan, if necessary, to effectively integrate cylinder S&M with the Operations, Testing, and Startup phase cylinder yard activities. Any revisions shall be submitted to the DOE for approval, and must be approved by the DOE prior to the Contractor's performing cylinder S&M during the Operations, Startup and Testing phase.

C.3.1.3.3 Train the Contractor's (and subcontractor's, if any) staff on the written programs, policies, procedures and plans associated with conversion facility start-up operations;

C.3.1.3.4 Advise the CO, in writing, whether any of the adopted programs, policies, procedures, and plans from the UDS Incumbent Contractor will require modification, as a result of the employee training, physical walk-down of facilities, and/or review of the as-built drawings and technical specifications. The Contractor's

written notification shall include a detailed description of any additional costs and a schedule for completion of the modifications (if modifications are required);

C.3.1.3.5 Prepare/revise, submit for DOE approval, and execute the approved **Conversion Facilities Operations and Maintenance Plan [D-2]** (see Section F, Table F-1). The Contractor shall submit updates to this plan, as needed, for DOE approval, such as after completion of the RA or hot functional testing (if option exercised). This plan shall address activities including start-up and conversion operations, cylinder sequencing, staffing, staff training, shift operations including facility maintenance, development of procedures, policies for equipment inspection and maintenance, and parts replacement and spares. This plan shall describe, as distinct elements, the hot functional testing and partial conversion operations.

The portion of the plan addressing hot functional testing shall, at a minimum, address in detail the following requirements during performance of hot functional testing:

a) Personnel qualifications.

b) Hot functional testing controls, including first use controls and access controls.

c) Management of the startup process.

d) Single conversion unit testing.

e) Initial conversion line testing.

f) Extended conversion line testing.

g) Identification of Facility functions to be demonstrated.

h) Method for establishing Facility operating parameters.

i) Startup sequence for a Facility.

j) Proposed specific cylinders to be processed during hot functional testing.

k) Maintenance control during hot functional testing.

l) Detailed requirements for test completion.

m) Post-testing review and reporting

n) Required records.

o) Applicable lessons learned from comparable facilities.

p) How the Contractor intends to utilize “lessons learned” from hot functional testing.

q) Emergency planning, drills and required exercises.

r) Detailed approach for transition from hot functional testing to partial conversion operations and Conversion Operations (see Section C.4).

The Contractor may elect to review/adopt the UDS Incumbent Contractor's Hot Functional Test Plan, which addresses the above elements, into their Conversion Facilities Operations and Maintenance Plan.

The Government may elect not to exercise the option for the Contractor to perform hot functional testing. The portion of the plan addressing hot functional testing shall also describe management of the work in the event the option to perform hot functional testing is not exercised.

The plan shall also address how the Contractor will manage a curtailment or suspension of plant operations caused by unforeseen events such as budget shortfalls or the inability of the LLW disposal site to receive products. The Contractor shall consider the cost benefit trade-off between continuing operations with onsite storage and safe, temporary shutdown without damage to equipment, without causing health, safety or environmental hazards or risks, and without impact to the operations personnel.

C.3.1.3.6 Prepare/revise, submit for DOE approval, and execute the approved **Readiness Assessment (RA) Plan [D-3]** (see Section F, Table F-1) to verify that all aspects of the ORRs completed by the UDS Incumbent Contractor and the DOE are adequately transitioned, and to demonstrate the Contractor's personnel, facilities, and procedures are adequate to begin hot functional testing, partial conversion operations and proceed to ramp-up to conversion operations. Although this is not a restart of the nuclear facilities, since the UDS Incumbent Contractor and the DOE will have completed their respective ORRs, DOE Order 425.1C, which addresses startup and restart of nuclear facilities, shall be used as a guide. DOE will provide written approval to the Contractor when the RA and associated pre-start findings are addressed.

C.3.1.3.7 Upon written approval from the CO for the RA, proceed to hot functional testing (if option exercised), partial conversion operations, and ultimately achieve conversion operations.

C.3.1.3.8 After the Contractor completes all activities contained in the Operations, Testing and Start-up Phase portion of the approved OTSP, including any other activities as may be authorized or

directed by the CO, the Contractor shall notify the CO in writing that it has achieved conversion operations. The Contractor shall obtain written approval from the CO before proceeding to Conversion Operations.

C.4 CONVERSION OPERATIONS

C.4.1 Conversion operations are defined by the conversion of DUF6 cylinders in a routine manner using the full design capability of the conversion facilities. The Contractor shall conduct conversion operations in accordance with the approved plans and conversion facility process design to meet the end point criteria specified. Once the Contractor achieves conversion operations, processing shall be performed at a minimum of annual process design capacity (see Table C-1). The RA, hot functional testing (if option exercised), partial conversion operations, and ramp up to conversion operations will occur during the Operations, Testing and Start-up Phase, consistent with successful execution of the OTSP.

Table C-1 DUF6 Processing Rates

Site	MT DUF6	Plant Capacity
Portsmouth Gaseous Diffusion Plant	250,000	13,500 MT/yr
Paducah Gaseous Diffusion Plant	441,000	18,000 MT/yr

C.4.2 The Contractor shall prepare/revise, submit for DOE approval, and execute the approved **Conversion Facilities Operations and Maintenance Plan [D-2]** (see Section F, Table F-1). The Contractor shall provide updates to this plan, for DOE approval, as needed, and following critical activities such as completion of the RA or hot functional testing (if option exercised) , but no less frequently than annually. This plan shall include startup and conversion operations, cylinder sequencing, staffing, staff training, shift operations including facility maintenance, development of procedures, policies for equipment maintenance, and parts replacement and spares.

C.4.3 The Contractor shall safely process DUF6 cylinders identified in the Cylinder Information Database (CID). Processing shall be with a preference for lower assay cylinders (less than 0.25% ^{235}U). Cylinders greater than 0.25% ^{235}U may be processed upon approval of the DOE, based upon the **Conversion Facilities Operations and Maintenance Plan [D-2]** (see Section F, Table F-1). Additional specific details for the operation sequence shall be coordinated with DOE as part of the recurring Award Fee Plan development.

C.4.4 The Contractor shall safely process and disposition DUF6 cylinders according to C.4.3 above, irrespective of size, shape, or condition. Cylinders which are corroded, dented, breached, or otherwise present a greater hazard in storage shall

not be excluded from conversion operations and must be converted according to the approved plans per C.4.3.

C.4.5 The Contractor shall operate and maintain the conversion facilities in accordance with DOE Order 5480.19, "Conduct of Operations Requirements for DOE Facilities," requirements of the Section I clause entitled "DEAR 970.5204-2 Laws, Regulations, and DOE Directives"; and applicable permits and licenses to convert DUF6 inventory to the chemically stable form.

C.4.6 The Contractor shall be responsible for any pre-conversion confirmation of cylinder contents and conditions necessary to establish that the DUF6 feed to the conversion facility will meet the design basis criteria for DUF6 feed as defined in the System Requirements Document. The Contractor also shall be responsible for any characterizations necessary to support applications for and approvals of required operating permits; to ensure subsequent compliance with environmental regulations and the requirements of these permits; to verify the technical and economic performance of operations; to demonstrate compliance with occupational health and safety ordinances; and to quantify, classify, and certify co-products, wastes, effluents, and emissions from the conversion facility.

C.4.7 The Contractor shall be responsible for the safe, compliant storage of the cylinders and products/wastes until these cylinders, co-products, or wastes are transported off-site and dispositioned (either acceptance or disposal by a licensed waste disposal site or transfer of title to another entity for use/reuse). The Contractor shall provide the capability to safely store for six months the empty cylinders and products/wastes generated from conversion, except the aqueous hydrofluoric acid (AqHF). AqHF must be continually dispositioned. The method of storage of each of these materials shall be considered in the NEPA and safety analyses. The Contractor shall store radiological waste materials in accordance with DOE Order 435.1 as required by the Section I clause entitled "DEAR 970.5204-2 Laws, Regulations, and DOE Directives." Storage and packaging of reactive fluorine products must conform, as appropriate, to federal, state, and local regulations for chemical hazards.

C.4.8 The Contractor shall be responsible for management of cylinder yard operations, including retrieving cylinders from the yards and transporting them to the conversion facility, according to the approved **Conversion Facilities Operations and Maintenance Plan [D-2] (see Section F, Table F-1).** The Contractor shall process both good and degraded cylinders in a systematic manner and shall not arbitrarily set aside degraded cylinders.

C.4.9 Any DUF6 conversion products, by-products, or the empty cylinders, which are determined to be waste shall be processed, packaged, and certified to meet the waste acceptance criteria (WAC) at the federal disposal facility or at another licensed low-level waste (LLW) repository. If the federal disposal facility is chosen by the Department for all or a portion of the material, the Contractor shall

transport the material to that site and transfer the material, certified for disposal, to the operating contractor of the federal disposal facility. If another licensed LLW repository is chosen for all or a portion of the material, the Contractor shall be responsible for disposition actions. Disposal of the conversion products and wastes shall be performed in accordance with applicable local, state, and federal regulations. Wastes can include the empty cylinders, neutralization products (e.g., fluorides of calcium, sodium, and potassium [CaF_2, NaF, KF]), spent absorbents, contaminated personal protective equipment, contaminated operating equipment and tools, mixed waste, and other incidental wastes. The processing of empty DUF6 cylinders shall include neutralization of heels, loading and neutralization of waste (and the empty cylinders, if necessary) into waste containers, and transporting for disposal.

C.4.10 Transuranic (TRU) wastes (as defined in DOE Order 435.1) are not anticipated to be generated from conversion operations; however, TRU wastes may be found in the remaining, non-volatile heels of some emptied cylinders. The existence of residual TRU wastes in empty cylinders does not preclude their refilling with uranium oxide, so long as the filled cylinder meets all requirements for transportation and disposition. Damaged or otherwise unsuitable cylinders cannot be filled with UOx. A nearly empty cylinder with a TRU heel may result in an overall TRU concentration of greater than 100 nCi/g, which may need to be treated as TRU waste as defined by DOE O 435.1. In this case, the Contractor must package, transport, and dispose in a safe and approved manner following applicable regulations.

C.4.11 As-built drawings shall be maintained current throughout the term of this contract, with revisions provided for DOE review no less frequently than annually.

C.5 PROJECT SUPPORT

The Contractor shall ensure effective performance of activities necessary to safely operate the conversion facilities and carry out the cylinder management activities. The following paragraphs of this Section define the Department's requirements to manage the conversion operations as a DOE project, and in accordance with all applicable DOE programmatic requirements (e.g., safety, regulatory compliance, security, quality assurance, records management). For the interface with other DOE site contractors see Section J, Attachment J-5 "DUF6 Services & Contract Interface Requirements Matrix."

C.5.1 Project Management

C.5.1.1 The Contractor shall prepare/revise, submit for DOE approval, and execute the approved **Project Management Plan [D-4]** (see Section F, Table F-1) that describes a project management system and a comprehensive, resource-loaded, and integrated contractor cost and schedule baseline in accordance with DOE Order 413.3A.

C.5.1.2 The Contractor shall support the DUF6 Federal Project Director (FPD) in his/her role as chairperson of the Integrated Project Team (IPT) that is responsible for overseeing the DUF6 project in accordance with DOE Order 413.3A.

C.5.2 National Environmental Policy Act (NEPA)

C.5.2.1 With the exception of the Supplement Analysis, the Contractor shall be responsible for preparation of any additional NEPA documentation required to complete the scope of work. The Contractor shall advise DOE of the requirement to prepare additional NEPA documentation, shall provide DOE with draft NEPA documentation for review and comment, and shall incorporate DOE comments in the final NEPA document. The Contractor shall reproduce and distribute the appropriate number of final NEPA documents, as requested by the DOE. NEPA documents shall be prepared in accordance with 40 CFR 1500-1508, the Department's implementing regulations for NEPA, found at 10 CFR 1021, and DOE O 451.1B.

C.5.2.2 The Contractor shall support the NEPA compliance activities of the DOE. The support will include, but may not be limited to, responding to questions from the NEPA compliance team, sending one or more subject matter experts to support the DOE at public meetings, and providing updated data to the NEPA team at specified intervals. The NEPA team may include federal personnel as well as non-federal personnel affiliated with contract vehicles separate from this contract.

C.5.3 Regulatory Management

C.5.3.1 The Contractor shall be responsible for permits, applications, licenses, and other regulatory documents required by the contract (See Section H and Section I). The Contractor shall prepare/revise, submit for DOE approval, and execute the approved **Regulatory and Permitting Management Plan [D-5] (see Section F, Table F-1).** This plan shall describe the strategy for ensuring that the conversion facilities are operated in accordance with applicable requirements found in the Section I clause entitled "DEAR 970.5204-2 Laws, Regulations, and DOE Directives." The plan shall include a schedule of regulatory and permitting actions. The schedule shall identify major milestones and critical actions necessary to ensure that licenses and permits have been obtained.

C.5.3.2 The Contractor shall incorporate the following requirements, at a minimum in the **Regulatory and Permitting Management Plan [D-5]** (see Section F, Table F-1) and shall comply with the requirements and all amendments:

C.5.3.2.1 The agreement, dated February 24, 1998, entitled "Ohio EPA Director's Final Findings and Orders" (DFF&O) as amended on June 24, 2005 and February 21, 2008 (See Section J, Attachment J-3).

C.5.3.2.2 The letter, "To William Murphie, PPPO, from Margaret M. Guerriero, Director, Waste, Pesticides and Toxics, US EPA, TSCA Approval for Storage for Disposal of PCB Bulk Product (Mixed) Waste (paint with 50 ppm or greater PCBs on cylinders containing radioactive material) U.S. DOE Portsmouth Gaseous Diffusion Plant, Portsmouth, OH, June 1, 2005 (See Section J, Attachment J-3).

C.5.3.2.3 The Commonwealth of Kentucky Natural Resources and Environmental Protection Cabinet Agreed Order, October 3, 2003 (See Section J, Attachment J-3.)

C.5.3.3 At the request of DOE, the Contractor shall negotiate in good faith and become a party and signatory to such future regulatory agreements or orders, as DOE may deem appropriate for the work performed pursuant to this contract.

C.5.4 Quality Assurance Program

At time of transition, DOE will have developed a DUF6 Operations- Quality Assurance Program (QAP) in accordance with American Society of Mechanical Engineers (ASME) NQA-1 2000 Quality Assurance Requirements or ASME NQA-1 2004 and addenda through 2007. Although the DOE Office of Environmental Management (EM) requires that ASME NQA-1-2004, and addenda through 2007 be implemented, the Department is evaluating the feasibility of revising the current DUF6 Operations Project Quality Assurance Plan (PQAP) to meet these requirements.

The Contractor shall adopt the existing PQAP as an interim program until such time as DOE approves any proposed changes. The adopted program, and any contractor changes, shall be approved by DOE prior to the Contractor performing any work affected by revisions to the PQAP.

C.5.4.1 Quality Assurance Management Plan

The Contractor shall prepare/revise, submit for DOE approval, and execute the approved organization-specific **Quality Assurance Management Plan (QAMP) [D-6]** (see Section F, Table F-1) describing how the applicable requirements of the EM QAP will be implemented and passed down to lower-tier organizations. The Contractor's quality assurance program shall be applied to all work performed by the

Contractor (e.g., mission, safety, and health). The Contractor's implementation of a specific QAP shall not relieve the Contractor from any responsibility to furnish the contracted items/services in full conformance with all the terms of the contract, 10 CFR 830 or other applicable laws and regulations. If there is any inconsistency between the specific QA program and any other terms of the contract, the more restrictive requirements apply.

C.5.4.2 Site Assurance System Description

The Contractor shall develop and incorporate into their QAMP and QA Program, submit for DOE approval, and implement the approved **Site Assurance System Description [D-7]** (see Section F, Table F-1), as required by DOE O 226.1A, Implementation of DOE Oversight Policy. This document shall identify and address program and performance deficiencies, opportunities for improvement, and processes to report deficiencies to the responsible managers and authorities. The Assurance System Description shall establish and effectively implement corrective and preventive actions, and share lessons learned across all aspects of the work scope. The Contractor shall annually review and update, as appropriate, their QAMP and the Site Assurance System Description and resubmit updates to DOE for approval.

C.5.4.3 Issues Management System

The Contractor shall develop and implement a comprehensive Issues Management System using a "zero-threshold" level for the identification, assignment of significance category, and processing for all issues raised across all levels of the Contractor's organization. The significance assigned to the issues shall be the basis for all actions taken by the Contractor in correcting the issue from initial causal analysis, reviews for reporting to DOE, through completion of Effectiveness Reviews, if required, based on the seriousness of the issue.

C.5.5 Conversion Product Management

The Contractor is responsible for and shall perform activities related to disposition of conversion products, which are to be used/reused. The Contractor shall be responsible for the sale of AqHF and disposition of any other conversion product, if specifically directed by the DOE per Section H, clause entitled "Sales of Conversion Products and DUF6 Inventory." The Contractor shall ensure that the product presented for sale meets the DOE-authorized free release limit of radioactive material contained therein. These activities include product generation, transportation, storage, packaging, and disposition. During execution of the OTSP, the Contractor shall prepare/revise, submit for DOE approval, and execute the approved **Conversion Product Management Plan [D-8]** (see Section

F, Table F-1)**.** This plan shall describe how each identified product is generated and how it is to be managed from the point of generation to disposition. The plan shall include the quantities, methods, and timetables for the management of each product stream. The plan shall be maintained and revised whenever changes are made that affect product management. Changes to the plan shall be subject to CO approval.

C.5.6 Waste Management

C.5.6.1 The Contractor is responsible for and shall perform activities related to waste management, which include waste generation, packaging and transportation (per requirements in DOE O 460.1B and DOE O 460.2A), storage, treatment, waste minimization, waste certification, and disposal. During execution of the OTSP, the Contractor shall prepare/revise, submit for DOE approval, and execute the approved **Waste Management Plan [D-9]** (see Section F, Table F-1). This plan shall describe how each identified waste is generated and how it is to be managed from the point of generation to disposal. The plan shall include the quantities, methods, and timetables for the management of each waste stream. The plan shall be maintained and revised whenever changes are made that affect waste management. Changes to the plan shall be subject to CO approval.

C.5.6.2 The DOE shall be responsible for ensuring a waste disposition pathway exists for radioactive waste and/or the radiological component of any mixed wastes. Disposition pathways may include a DOE-owned and operated site or a privately-owned and operated site. The Contractor shall assist the DOE in identifying disposition pathways and in preparing documentation necessary to demonstrate each waste stream's compliance with the receiver site's waste acceptance criteria (WAC). The Contractor shall also assist DOE with preparation of additional documentation (e.g., certification program descriptions, briefing slides, etc. for interactions with DOE and/or U.S. Environmental Protection Agency (EPA) officials, state governments, members of the public, and/or representatives from the candidate waste disposal sites.)

C.5.6.3 Waste Disposition Requirements

The Contractor shall store, characterize, process, package, transport, and dispose of waste in accordance with applicable laws, regulations, and DOE directives. The types of waste include, but are not limited to: low-level waste (LLW), mixed low-level waste (MLLW), industrial waste, sanitary waste, and hazardous waste. Waste is considered disposed of when it has been shipped to, and accepted for final disposition at, a properly licensed and permitted disposal site. The Contractor shall avoid generating waste with no pathway for disposal.

The uranium oxide converted product shall be disposed of at federal and/or commercial waste disposal sites that are (is) properly licensed and permitted and that meet federal, state and local regulations, in accordance with the Final Supplement Analysis for Location(s) to Dispose of Depleted Uranium Oxide Conversion Product Generated from DOE's Inventory of Depleted Uranium Hexafluoride (DOE/EIS-0359-SA1 and DOE/EIS-0360-SA1) (SA) and amended Record of Decision (ROD). If a disposal site becomes available that is different from that specified in the amended ROD, the Contractor shall assist DOE in evaluating it as an alternative (e.g., cost/benefit analyses, NEPA documentation). On-site disposal will not be utilized.

For LLW and/or MLLW resulting from conversion operations, the Contractor shall:

1. Manage and dispose of waste in accordance with the Contractor Requirements Document (Attachment 1) of DOE Order 435.1.
2. Establish and maintain an approved waste acceptance certification program, in accordance with disposal site requirements.
3. Prepare exemption requests in accordance with DOE Order 435.1 and associated DOE manuals and guides for use of commercial disposal facilities, if commercial disposal options are being pursued.
4. Prepare waste profiles as required and obtain disposal site approval.
5. Obtain final waste form certification from disposal sites. The Contractor will ensure the final uranium oxide waste form is compliant with the disposal site waste acceptance criteria (WAC), applicable site permits and licenses and RCRA Land Disposal Restrictions (LDR).
6. Prepare required procedures, work plans, waste shipping forecasts for processing and disposing of waste.
7. Process and treat the waste as required to meet disposal site WAC and LDR, as applicable.
8. Utilize disposal-site approved disposal containers for the waste.
9. Coordinate with the disposal sites and be the shipper of record for waste being shipped to disposal sites.
10. Prepare the waste for transport to the disposal facility.
11. Transport the waste from the conversion facility to the proposed nuclear waste disposal site, in accordance with the SA and the amended ROD.
12. Provide interim storage for waste that is ready for disposal until the Contractor can arrange shipping. Shipments of the waste shall not commence before until issuance of the amended ROD by DOE.

13. Load and transport the waste for disposal.
14. Dispose of the waste.

Start-up and operation of the conversion facility and storage of the waste shall not be constrained by uncertainty associated with the selection of the disposal sites as documented in the final issuance of the SA and amended ROD.

For hazardous and industrial waste, the contactor shall:

1. Prepare waste profiles as required and obtain disposal site approval.
2. Obtain final waste form certification from disposal sites.
3. Prepare all required procedures, work plans, etc., for processing hazardous and industrial waste.
4. Process and treat the waste as required to meet disposal site WAC and RCRA LDR, as applicable.
5. Procure disposal site approved disposal containers for the hazardous and industrial waste.
6. Coordinate with the disposal sites and be the shipper of record for hazardous and industrial waste being shipped to disposal sites.
7. Prepare the hazardous and industrial waste for transport to the disposal facility.
8. Provide interim storage for hazardous and industrial waste ready for disposal until the Contractor can arrange shipping.
9. Load and transport hazardous and industrial waste for disposal.
10. Dispose of the hazardous and industrial waste.

C.5.6.4 Waste Interfaces

The Contractor shall maintain liaison with the following:

1. DOE and contractors at federal and/or commercial LLW/MLLW disposal facilities. Activities include:

    a. Implementation of DOE Order 435.1.
    b. Maintenance of the Waste Certification Program.
    c. Development of waste disposal profiles for LLW and MLLW.
    d. Characterization and certification of LLW and MLLW.
    e. Shipment and disposal of LLW and MLLW.
    f. Support with preparation of documentation for meetings with DOE, US EPA officials, State governments, members of the public, and/or representatives from the waste disposal sites.

2. Other DOE sites for:

    a. Consultation support for other DOE waste generators to ensure proper waste preparation and demonstration activities.
    b. Integration activities as necessary for transfer of waste, samples, etc. to or from other sites.
    c. DOE Office of Disposal Operations integration activities, e.g., annual waste forecasts, bi-weekly LLW/MLLW conference calls, and lessons learned.
    d. DOE's Office of Health, Safety and Security, and the Office of Disposal Operations regarding the preparation of commercial exemptions, as appropriate, in accordance with DOE Order 435.1 and implementing documents.

C.5.6.5 Waste Disposition Alternatives

The baseline approach is for the uranium oxide powder to be compressed in a roll compactor to reduce its volume, be loaded into empty or heel cylinders retrofitted with flanged filling nozzles, and moved into an airlock before exiting the process building. The cylinders will then be loaded into gondola railcars or flat bed trucks for transport to a disposal site. As directed by the Department, the Contractor shall perform value engineering and cost benefit studies to evaluate alternate packaging, loading, transportation, transloading and disposal alternatives, to reduce the cost of waste disposition.

C.5.7 Integrated Safety Management

C.5.7.1 Protection of workers, the public, and the environment are fundamental responsibilities of the Contractor and a critically important performance expectation. The Contractor's Environmental, Safety, and Health (ES&H) program shall be operated as an integral and visible part of how the organization conducts business. A key element will be to implement DOE Policy 450.4, "Safety Management System Policy," which includes prioritizing work planning and execution, establishing clear ES&H priorities, and allocating the appropriate level of trained and qualified resources to address programmatic and operational considerations. The Contractor shall ensure that cost reduction and efficiency efforts are fully compatible with ES&H performance.

C.5.7.2 The Contractor shall prepare/revise, submit for DOE approval, and execute the approved **Integrated Safety Management System Plan (ISMS) [D-10]** (see Section F, Table F-1). The Contractor shall provide updates to this plan, as needed, and submit to DOE for approval. The plan shall be prepared in accordance with the Section I clause entitled "DEAR

952.223-71 Integration of Environment, Safety, and Health into Work Planning and Execution." Documentation of the plan shall describe how the Contractor will (1) define the scope of work; (2) identify and analyze hazards associated with the work; (3) develop and implement hazard controls; (4) perform work within controls; and (5) provide feedback on the adequacy of controls and continue to improve safety management. The plan should address the environmental management system (DOE O 450.1A), and radiation protection (10 CFR 835). The Contractor shall manage and perform work in accordance with this plan.

C.5.7.3 The Contractor shall perform activities in compliance with applicable health, safety, and environmental laws, orders, regulations, and national consensus standards; and governing agreements, permits, and orders executed with regulatory and oversight government organizations. The Contractor shall take necessary actions to preclude serious injuries and/or fatalities, keep worker exposures and environmental releases as low as reasonably achievable below established limits, minimize the generation of waste, and maintain or increase protection to the environment, and public and worker safety and health.

C.5.7.4 Incorporating integrated line management, the Contractor shall put in place a system that clearly communicates the roles, responsibilities, and authorities of line managers. The Contractor shall hold line managers individually accountable for implementing necessary controls for safe performance of work in their respective areas of responsibility. The Contractor shall establish effective management systems to identify deficiencies, resolve them in a timely manner, ensure that corrective actions are implemented (addressing the extent of conditions, root causes, and measures to prevent recurrence), and prioritize and track commitments and actions. The Contractor shall evaluate ES&H performance in selection of its subcontractors and incorporate ES&H requirements into subcontracts.

C.5.7.5 The Contractor shall prepare/revise, submit for DOE approval and execute the approved **Worker Safety and Health Program (WSHP) [D-11]** (see Section F, Table F-1) that describes the methods for implementing the requirements of Subpart C of 10 CFR 851, and upon approval execute the program.

C.5.7.6 Final **Documented Safety Analysis (DSA)** and **Technical Safety Requirements (TSR) [D-12]** (see Section F, Table F-1) for conversion and cylinder yard operations will be approved by DOE prior to ORR. During transition, the Contractor will be expected to review and adopt the DSAs and TSRs. The Contractor shall operate the facilities in accordance with the DOE approved DSAs and TSRs. The Contractor shall provide annual updates to these documents as required by 10 CFR 830.302. The

DSA updates for the Portsmouth and Paducah sites shall evaluate hazards, including nuclear, chemical, and natural phenomena hazards, and assess the impact of these events on the safe operation of the conversion facilities.

C.5.7.7 Safety-Significant Systems, Structures, and Components (SS SSCs) shall comply with appropriate codes and standards identified in DOE Guide 420.1, March 2000. The following components have been identified as safety-significant based on the hazard analyses and are documented in the current DSAs. Refer to the DOE approved DSAs for Portsmouth and Paducah.

- Autoclave containment boundary
- Autoclave isolation valves
- DUF6 piping pressure boundary
- UF6/ UO_2F_2 detectors
- Hydrogen detectors
- Conversion Building hydrogen isolation valve
- Hydrogen piping pressure boundary
- HF receiver tanks
- HF receiver tank isolation valves
- HF vapor detectors
- HF storage tanks
- HF storage tank isolation valves
- Secondary HF liquid confinement
- Aqueous HF piping pressure boundary
- Off-gas piping pressure boundary
- Vehicle barriers
- Independent Safety System
- Conversion Unit
- Cylinder Evacuation Room (CER) cylinder temperature element
- Conversion Building
- Standard DUF6 feed cylinder
- Cylinder Transfer System CER DUF6 header isolation valve
- Grading and curbing
- Fire suppression system

C.5.8 Radiation Protection

The Contractor shall be fully responsible for radiation protection and shall prepare/revise, submit for DOE approval, and execute the approved **Radiation**

Protection Plan (RPP) [D-13] (see Section F, Table F-1) in accordance with 10 CFR 835.

C.5.9 Security

The Contractor shall prepare/revise, submit for DOE approval, and execute the approved **Site Security Plan [D-14]** (see Section F, Table F-1). The Contractor shall also provide updates to this plan for DOE approval, as needed. This document shall be a compendium of plans for meeting the DOE safeguards and security requirements, including DOE Cyber Security Management Program (DOE O 205.1A), Identifying Classified Information (DOE O 475.2, DOE Manual 475.1-B), and Unclassified Foreign Visits and Assignments (DOE O 142.3). The plan shall include the contractor's methodology for physical protection of the conversion facilities, information security, and personnel security. The Site Security Plan shall be prepared in accordance with the DOE Order 470 series requirements as they apply to the conversion facilities as required by the Section I clause entitled "DEAR 970.5204-2 Laws, Regulations, and DOE Directives." The plan shall include protection of information from disclosure pursuant to Export Controlled Information (ECI) in accordance with 15 CFR 774 and Unclassified Controlled Nuclear Information (UCNI) requirements in 10 CFR 1017. The plan shall also include a sabotage vulnerability assessment covering aspects of facility operation, which might have an unacceptable impact on personnel, the public, or the environment. The Site Security Plan shall be coordinated with other onsite activities, including Emergency Management (DOE O 151.1C), to ensure adequate protection of the conversion facilities and uranium-bearing materials. The local DOE cognizant security authority shall approve the Site Security Plan and updates.

C.5.10 Emergency Management

C.5.10.1 The Contractor shall provide support to DOE by participating in the site's Emergency Management program including planning, preparedness, response, recovery, and readiness assurance per DOE O 151.1C.

C.5.10.2 The Contractor shall prepare/revise, submit for DOE approval, and execute the approved **Site Emergency Plan [D-47]** (see Section F, Table F-1) and implementing procedures in coordination with the site's Emergency Management Program.

C.5.10.3 The Contractor shall coordinate with USEC or DOE contractor and provide adequate staff to support the Emergency Operation Center efforts for its operations, and ensure adequate support is available to respond to an emergency. The Emergency Operation Center for the site is provided by USEC with specific support from DOE and DOE contractors for DOE activities.

C.5.10.4 The Contractor shall coordinate with USEC or DOE contractor in developing and participating in a drill and exercise program that is compliant with DOE Order 151.1C. The Contractor must participate in the site's training, drill/exercise program.

C.5.10.5 The Contractor shall prepare/revise, submit for DOE approval, and execute the approved **Emergency Planning Hazard Surveys [D-48]** (see Section F, Table F-1) and **Emergency Planning Hazard Assessments [D-49]** (see Section F, Table F-1) at least every three years or whenever a major substantial change occurs. The Contractor shall develop and update as needed, site/facility-specific Emergency Action Levels (EALs) for the spectrum of potential Operational Emergencies identified by the Emergency Planning Hazard Assessment to include protective actions for implementation in the Site Emergency Program.

C.5.10.6 The Contractor shall also prepare/revise and submit for DOE approval timely **Emergency Readiness Assurance Plan (ERAP) [D-50]** (see Section F, Table F-1) information to be included in the Site Integrated ERAP for DOE submittal per DOE Order 151.1C.

C.5.10.7 The Contractor shall prepare/revise, submit for DOE approval, and execute the approved **Continuity of Operations Plan (COOP) [D-51]** (see Section F, Table F-1) in coordination with the site's COOP program per DOE O 150.1.

C.5.11 Material Safeguards

The Contractor shall prepare/revise, submit for DOE approval, and execute the approved **Nuclear Materials Control and Accountability Plan [D-15]** (see Section F, Table F-1 integrating DOE P 470.1, Integrated Safeguards and Security Management Policy, in accordance with DOE Manual 470.4-6. The Contractor shall provide updates to this plan as needed, and submit for DOE approval. The plan shall include the Contractor's methodology for material control and accountability for uranium feed and conversion products. The DOE cognizant security authority must approve the Nuclear Materials Control and Accountability Plan, and any updates, prior to the Contractor's assuming cylinder surveillance and maintenance responsibilities.

C.5.12 Records Management

C.5.12.1 The Contractor shall conduct records management in accordance with Title 44 USC, Chapters 21, 29, 31, 33, and 35; 36 CFR, Chapter 12, Subchapter B (Records Management); DOE O 243.1 (Records Management Program) and DOE O 243.2 (Vital Records), and any other DOE requirements as directed by the CO. These functions include, but are not limited to: tasks associated with creation/receipt, maintenance, storage/preservation, protecting, scheduling, indexing and dispositioning

active and inactive records; retrieving records from on- and off-site storage facilities, and supporting ongoing Freedom of Information Act (FOIA), Privacy Act, Energy Employee Occupational Illness Compensation Program (EEOICPA) and legal discovery requests.

The Contractor shall prepare/revise, submit for DOE approval, and execute the approved **Records Management Plan [D-16]** (see Section F, Table F-1) consistent with records management regulations, including Section I clause entitled "DEAR 970.5204-3 Access To and Ownership of Records" and Section H clause entitled "Privacy Act Systems of Records." The Records Management Plan is a high-level program document that shall describe, at a minimum: a clear delineation between Government-owned and contractor-owned records; how the Contractor will manage all life-cycle phases of Government-owned records; the contractor organization in charge of the records management program; provision of records management training to all contractor personnel; the safeguarding, protection and maintenance of records (including records containing sensitive information, or classified, if applicable); the use of DOE Records Control Schedules; the Contractor's procedures for final disposition of records (e.g., via transfer to a Federal Records Center, destruction, or transfer to another DOE contractor); and the Contractor's procedures for implementation of the records management program as a whole, including relationships with other programs that cannot function properly without sound records search and retrieval capability (e.g., processing claims received by the Department of Labor pursuant to the EEOICPA). The Records Management Plan shall be submitted to the CO for review/approval by the Records Management Field Officer.

C.5.12.2 All records acquired or generated by the Contractor in performance of this contract, including, but not limited to, records from a predecessor contractor (if applicable) and records described by the contract as being maintained in Privacy Act systems of records, except for those defined as contractor-owned (Section I clause entitled "DEAR 970.5204-3 Access to and Ownership of Records"), shall be the property of the Government.

C.5.12.3 The Contractor shall preserve and disposition records in accordance with National Archives and Records Administration (NARA)-approved records disposition schedules (DOE Record Disposition Schedules), as posted on the DOE Office of the Chief Information Officer (OCIO) Records Management web page. *Note: Records Retention standards are applicable for the classes of records described therein, whether or not the records are owned by the Government or the Contractor (DEAR 970.5204-3).*

C.5.12.4 The statutory definition of a "record," as per 44 USC 3301, applies to all departmental records including those created, received, and maintained by all contractors pursuant to their contracts. Virtually all recorded

information in the custody of the Government (including information created by contractors on behalf of the Government) regardless of its media (hard copy, machine-readable, microfilm, or electronic) is considered to be "Government" records. Records include not only the deliverables specified by the contract, but can also include things such as any supporting or backup data used to create the contract deliverables, and related health, safety, environmental, quality assurance information, etc.

C.5.13 Property Management

C.5.13.1 The Contractor shall manage personal property in accordance with the property clauses of this contract, 41 CFR 109, and DOE Order 580.1, and shall prepare/revise, submit for DOE information or approval, and execute the following items, (see Section F, Table F-1):

- **Property Management Plan [D-17];**
- **Report of Excess Property to GSAXcess [D-18];**
- **Report of Annual Physical Inventory Results [D-19];**
- **Report of Loss, Damage, Destruction or Theft [D-20];**
- **Property Information Database System (PIDS) [D-21];**
- **Personal Property Scorecard Plan-New Fiscal year [D-22];**
- **Personal Property Scorecard Report- Past Fiscal Year [D-23];**
- **Reports of Sales and Exchanges [D-24];**
- **Vehicle Fleet Reports [D-25]**.

C.5.13.2 The Contractor shall manage real property in accordance with 41 CFR 102 and DOE Order 430.1B, and shall perform the following activities:

C.5.13.2.1 Review real property records, including leases, licenses, land agreements, contracts, etc. associated with conversion facility operations at the Portsmouth or Paducah sites;

C.5.13.2.2 Prepare an **Inventory of Active Real Property Records [D-26]** (see Section F, Table F-1) for review by a Certified DOE Realty Specialist;

C.5.13.2.3 Maintain, update, and validate the **Facilities Information Management System (FIMS) [D-27]** (see Section F, Table F-1) database; and

C.5.13.2.4 Prepare/revise, submit for DOE information, concurrence, or approval, and execute the following items (refer to Section F – Deliveries or Performance for additional details):

- **Real Property Procedures [D-28]**;
- **FIMS Reporting [D-29];**
- **Real Property Asset Management Scorecard Reporting [D-30]**;
- **"Draft" Ten Year Comprehensive Site Plan [D-31];**
- **General Services Administration (GSA) Reporting [D-32]**;
- **Other Real Property Reporting [D-33]**;
- **"Final" Ten Year Comprehensive Site Plan [D-36], as needed**

C.5.14 Critical Interfaces and Integration

C.5.14.1 The Contractor is one of multiple entities performing work under the direction or permission of DOE at each site. In general, other DOE site contractors or the United States Enrichment Corporation (USEC) are responsible for aspects of the larger site, and prior to completion of transition, the UDS Incumbent Contractor is responsible for aspects within the areas under their direct control, including the cylinder yards. The Contractor shall interface with many other entities for utilities and services to enable successful completion of conversion operations under this contract. The nature of those interfaces with other DOE site contractors and USEC are described in Section J, Attachment J-5, entitled "DUF6 Services & Contract Interface Requirements Matrix."

C.5.14.2 The Contractor shall support and actively participate in periodic meetings between the DOE, DOE site contractors, and USEC to coordinate and integrate site activities and issues. The Contractor shall prepare and submit a summary of each meeting and assigned actions, which may be reviewed by the DOE. Meetings described in Section J, Attachment J-5, entitled "DUF6 Services & Contract Interface Requirements Matrix," are expected to occur no less frequently than monthly; however, they may occur more frequently and shall be attended by a senior manager from the Contractor's organization as appropriate, or as directed by the Contacting Officer Representative (COR).

C.5.14.3 The Contractor shall establish a management office with personnel physically located at Lexington, Kentucky for coordination with the PPPO. This office shall provide the resources to coordinate and manage the administrative activities of the conversion facility operations at Portsmouth and Paducah sites through a single, point-of-contact Project Manager as identified in Section H clause entitled "Key Personnel." This individual and staff shall provide at a minimum functions of accounting, finance, budget, and senior leadership to interface with the DOE PPPO Manager, the DOE DUF6 FPD, and the DOE CO. All contract deliverables will be submitted through this office to the PPPO.

C.6 CYLINDER MANAGEMENT

C.6.1 Cylinder Information Database (CID) Management

The CID contains cylinder defect characterization, contents, inspection status, S&M activities, and location for the DOE-owned UF6 inventory at the two sites. The Contractor shall maintain and update the CID beginning on the date the Contractor assumes responsibility for cylinder management as designated by the CO at the end of the Mobilization and Transition Phase. The Contractor shall generate cylinder information or cylinder content reports as requested by DOE to support project and program requirements.

C.6.2 Cylinder Surveillance and Maintenance (S&M)

C.6.2.1 The Contractor shall perform surveillance and maintenance for the DOE inventory of DUF6, low-enrichment uranium (LEU) hexafluoride (UF6), normal UF6, and heel and empty cylinders. During execution of the OTSP, the Contractor shall review the existing approved **Cylinder Surveillance and Maintenance Plan [D-34]** (see Section F, Table F-1) and either accept or revise this plan. Any revisions must be approved by the CO. The Contractor shall provide updates to this plan, as needed, and submit for DOE approval. This plan must be accepted by the Contractor or any revisions approved by DOE prior to the Contractor's assuming S&M responsibility and must address the current mission, safety, and regulatory requirements (refer to the DUF6 Operations website). *Note: The **Site Security Plan [D-14]** and the **Nuclear Materials Control and Accountability Plan [D-15]** must be approved prior to transition of cylinder surveillance and maintenance.*

C.6.2.2 Once cylinder S&M activities have been transitioned, the Contractor shall perform activities necessary to manage the DOE UF6 cylinder inventory, including required cylinder inspections, maintenance of the existing UF6 cylinder yards, and disposition of empty and heel cylinders. In addition, the Contractor shall be required to take receipt of newly generated DUF6 cylinders from U.S. commercial enrichers. At the direction of DOE, the Contractor shall perform DUF6, LEU or normal assay cylinder

management, movements, and transfers as necessary to support other DOE programs.

C.6.2.3 The Contractor shall provide a plan to transport the limited population of cylinders smaller than 30 inches in diameter to Portsmouth, and subsequently transfer them to another DOE site contractor that has the responsibility to disposition cylinders less than 30 inches in diameter. This plan shall be a section in the **Waste Management Plan [D-9]** (see Section F, Table F-1) and be executed upon approval by the CO.

C.6.2.4 The Contractor shall develop and propose to the DOE acceptance criteria for commercial DUF6 feed material that would not impact the long-term viability of conversion operations. The proposed acceptance criteria will be provided for DOE approval within one year after contract award.

C.7 RELATED SERVICES

In addition to the services specifically described in other provisions of this Statement of Work, the Contractor shall perform services as DOE and the Contractor shall agree in writing that will be performed from time to time under this contract at Paducah or Portsmouth, or elsewhere, as follows:

C.7.1 Services incidental or related to the services described in other provisions of this Statement of Work; and

C.7.2 Services using existing or enhanced facilities and capabilities for the NRC under agency agreements between NRC and DOE.